

## THE BORIS MINTS INSTITUTE

# FOR STRATEGIC POLICY SOLUTIONS TO GLOBAL CHALLENGES

7th Annual Report | **2022** 



SUSTAINABLE DEVELOPMENT















INEQUALITY

















CONFLICT RESOLUTION







- Members of BMI's Advisory Board and Academic Committee: Armenia, Bulgaria, Czech Republic, Finland, Germany, Kenya, Luxembourg, Montenegro Russia
- BMI Research: California, India, Kenya, OECD, Rwanda, NEPAL
- BMI Conferences: Armenia, Finland, Georgia, Italy, Malta, Montenegro

## **CONTENTS**

Letter from Founder and President, Dr. Boris Mints	2
Letter from Head of BMI, Prof. Itai Sened	4
BMI Vision	6
BMI Structure	7
Steering Committee	7
International Academic Committee	9
International Advisory Board	11
Management	15
Research	17
Water Lab	18
Inequality Lab	24
Conflict Resolution Lab	26
Renewable Energy Lab	32
Demography Lab	34
Sustainable Development Lab	38
Research Updates and Graduating Fellows	39
The 2021 BMI Prize	40
BMI Annual Research Conference	41
BMI Webinars	42
Other BMI Activities	43
Future Activities	50

### >>> LETTER FROM FOUNDER AND PRESIDENT, DR. BORIS MINTS



Living through the three years of the COVID-19 Pandemic and several months into the Russian Invasion of Ukraine that completely changed our perspective on all areas connected to human life: conflict, energy, water and food security, inequality, all types of institutions, geopolitical cooperation, self-governance, and human development. It seems that the old-world order is no longer functioning and therefore it is the job of interdisciplinary teams functioning across the public, private and academic sectors to create innovative ways of restructuring the system. In order to accomplish that BMI will be diversifying its activities and research

directions that will contribute towards creating practical public policy recommendations for governmental leaders and increasing research potential in the newly erupted directions.

Throughout the past year I want to note some important activities that took place under the umbrella of the Institute. First of all, we awarded the 2021 BMI Prize to Dr. John N. Nkengasong, Director, CDC Africa for his exceptional efforts to combat the COVID-19 Pandemic on the continent. Secondly, another important achievement was the inauguration of the Matanel Garden at the Naftali Building, TAU – home of BMI with the support of the Matanel Foundation. We were also able to host two major events, among a few others – the webinar on the Future of Economic and Democratic Institutions in collaboration with the University of Vienna, which was attended by key policy and decision makers, as well as leading academics including Prof. Michael Kremer and Prof. Paul Romer two Nobel Prize Laureates in Economic Sciences. The second event was our first Annual Conference held in-person after the beginning of the global pandemic, which took place 11-12th of May, 2022 in Tel Aviv. We were able to talk about the energy crisis, conflict resolution amid the war in Ukraine and hear exciting research from some of the students. We are also looking forward to bringing together world-class academics in the field of public policy in the newly inaugurated format of the "Think Club", in order to learn how to deal with aforementioned challenges. With this in mind, I want to congratulate all graduating BMI Fellows, of which there are 5 this year and wish them luck in their future endeavors.

I want to thank Prof. Itai Sened, head of the Institute, researchers as well as the management for the continued great work. I look forward to continuing the Institute's work in the new format and hope that we will be able to contribute to solving these two crucial challenges that will determine the forthcoming global structure.

**Dr. Boris Mints** 

Founder and President of the Boris Mints Institute for Strategic Policy Solutions to Global Challenges

### >>> LETTER FROM HEAD OF BMI, PROF. ITAI SENED



As we close on the 7<sup>th</sup> year of activity of the Boris Mints Institute for Strategic Policy Solutions to Global Challenges, we have a lot to be proud of. The Institute has had a very significant contribution to the body of knowledge and policy reforms in the fields of sustainable water and energy resources. We helped communities around the globe preparing and resorting to new structures of renewable energy and water supplies. We have also contributed significantly to the emergence of a new breed of knowledge regarding conflict management and resolution.

Unfortunately, the war in Ukraine had our heads spinning with grief over the unnecessary loss of lives and property. We thus turned our attention to this disastrous outcome that became what we believe to be the most important challenge currently facing the globe. In a series of public and closed discussions with the outstanding group of scholars that has, by now, gathered around the Institute to create the BMI community of research and knowledge, we have learned to associate this sad event with the failure of existing economic and political institutions at the national and global level. Thus, this has become the new focus of research at the institute.

Given the magnitude and urgency of the task, the Institute has restructured itself to better address it in the most efficient way:

#### **New BMI Structure**

Human Development Lab	Climate & Energy Lab	Institutions Research Lab
Demography	Sustainable Development	Democratic Institutions
Conflict Resolution	Water	Geopolitical Cooperation
Inequality	Food Security	Economical Institutions
Future of Labor	Future of Cities	Future of Global Institutions

The orange boxed activities will be directly funded by the Institute's available resources thanks to the generosity of Dr. Mints. The dark grey boxed activities will only be partially subsidized by BMI and the light grey with orange inscription boxes have become financially independent, remaining an integral part of the Institute's activities. This was made possible by securing significant outside fundings for these activities allowing them to continue without direct financial support from the Institute.

Much is awaiting us in this coming year as we focus our attention at the new global challenges awaiting our outstanding efforts to find strategic policy solutions to address them.

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#### **Professor Itai Sened**

Dean of the Gershon H. Gordon Faculty of Social Sciences Head of the Boris Mints Institute for Strategic Policy Solutions to Global Challenges

## **BMI VISION**

Founded in 2015, The **B**oris **M**ints Institute for Strategic Policy Solutions to Global Challenges at Tel Aviv University encourages innovative thinking, research and planning to promote a significant positive change in the world. We focus on designing innovative, multidisciplinary and sustainable strategic and operational plans to enhance the welfare around the globe.

The Institute brings together top-tier academics, world leaders, and talented and passionate researchers from Tel Aviv University and other leading universities to:

- Analyze pressing issues from an interdisciplinary, broad systemic perspective;
- Draw on TAU expertise, across various faculties, confronting contemporary challenges of inequality, democracy, economics, human development, environmental engineering, sustainability and welfare;
- Formulate novel and practical solutions backed by rigorous scientific methodology;
- Deliver strategic policy recommendations and detailed blueprints for implementation to decision-makers worldwide.

The Institute currently operates six research labs, conducting collaborative research involving technological, social, and policy factors.

A significant part of our research is based on a Startup-like methodology, including a "hands-on" approach, creating economically logical, sustainable, and fair policy solutions.

Starting 2022, the Institute aims to confront two significant global challenges that pose a substantial threat to global stability and sustainability: The Structure of Democratic and Economic Institutions.

### >>> BMI STRUCTURE

#### **Steering Committee**



#### Dr. Boris Mints, President

Dr. Mints has been one of the most influential businessmen in Russia in the 2004 – 2017. Currently Boris Mints is the Vice President of the World Jewish Congress, which is one of the largest and most significant organization that represents Jewish people from over 100 countries, representing their pluralism. He is also the Chairman of the Council of Patrons of the Conference of European Rabbis (CER), which is the primary Orthodox rabbinical alliance in Europe. Awarded the Dashkova's Prize "Philanthropist of the Year" and Honorary Fellow of Tel Aviv University.



#### Prof. Milette Shamir, Vice President for International Affairs at Tel Aviv University

Milette Shamir's research focuses on U.S. literature and culture in the nineteenth century. She is the author of Inexpressible Privacy: The Interior Life of Antebellum American Literature (Penn University Press, 2005) and the editor of Boys Don't Cry? Rethinking Narratives of Masculinity and Emotion in the US (with Jennifer Travis, Columbia University Press, 2002). Her work appeared in several journals and essay collections devoted to the study of American literature and cultural history. Shamir is the editor-in-chief of the journal Poetics Today (with Irene Tucker of UC Irvine). From 2015 to 2019 she served as Vice Dean of the Humanities for Academic Affairs. She co-founded TAU's American Studies program in 2006, and served as its head for thirteen years.



**Prof. Tami Ronen-Rozenbaum,** Former Dean of the Gershon H. Gordon Faculty of Social Sciences at TAU and the Founding Head of the MA program in Developing Countries

A researcher in the field of the Cognitive Behavioral approach and Positive Psychology. Her research focuses on the function of self-control skills, positive emotions and social support as a way of overcoming stress and developing happiness. In her work, Prof. Ronen-Rozenbaum links a complex theoretical model of understanding human strengths and coping abilities to techniques for developing useful interventions in the field.



Mrs. Irina Buylova, Representative of BMI President

Executive director of the Yegor Gaidar Foundation (Russia), a prominent journalist and internationally recognized expert in building effective interaction models for Russian and international NGOs-including educational, economic and social development institutions. In the 1990s and 2000s she reported on social policy and development issues in the context of the turbulent Russian economic and political transitions.



**Prof. Itai Sened,** Head of BMI, Founding Head of the School of Social and Policy Studies at TAU and the Dean of the Gershon H. Gordon Faculty of Social Sciences

Prof. Sened is the Dean of the Gershon H. Gordon Faculty of Social Sciences at Tel Aviv University. He returned to TAU after serving for 12 years as director of the Institute for New Institutional Social Sciences at Washington University, which was established by Nobel Laureate Douglass C. North. He is the founding head of the Boris Mints Institute for Strategic Policy Solution to Global Challenges and the founding Head of the School of Social and Policy studies at TAU.

#### **International Academic Committee**



Prof. Yossi Rozenwaks, Faculty of Engineering, Tel Aviv University

Prof. Rozenwaks is a leading researcher in various fields, including nanotechnology, electrostatic force microscopy, atomic force microscopy, nanoscale charge injection in memory devices, solar cells, organic semiconductor devices, biological field effect transistors, charge carrier dynamics in semiconductors, and recombination processes.



**Prof. Miranda Schreurs,** Professor of Environment and Climate Policy, Bavarian School of Public Policy, Technical University of Munich

Previously the director of the Environmental Policy Research Center and professor of Comparative Politics at the Freie Universität in Berlin and an associate professor in the Department of Government and Politics at the University of Maryland. Prof. Schreurs' focuses on comparative environmental politics and policy in Europe, the United States, and East Asia. She is a member of the German Advisory Council on the Environment.



#### **Dr. Segenet Kelemu**, Director General of the International Center of Insect Physiology and Ecology (ICIPE) Nairobi, Kenya

Dr. Kelemu is the Director General of the International Center of Insect Physiology and Ecology (ICIPE) in Nairobi, Kenya. She is a molecular plant pathologist whose work focuses on the elucidation of molecular determinants of host-pathogen interactions, development of novel plant disease control strategies-including genetic engineering-biopesticides, pathogen population genetics and dynamics, and endophytic microbes and their role in plant development. She has first-hand experience with both the challenges and successes associated with African agriculture, from tending to fields to directing world-class laboratories.



Prof. Itai Sened, Head of BMI, Founding Chair School of Social and Policy Studies at TAU and Dean of the Gershon H. Gordon Faculty of Social Sciences

Prof. Sened's specializes in the study of institutions and how they affect policy at all levels. These institutions include not just formal institutions at the national and local level, but also the informal institutions which determine social norms and cultural habits and may enhance or impede economic development and social prosperity. In recent years his research has become less technical and more applied to the fields of renewable energy and institutions that protect the growing inequality in income and assets around the globe.

#### **International Advisory Board**



Mrs. Joelle Aflalo, Co-Founder of the Matanel Foundation

In 2006, she founded, together with Mr. Gad Boukobza, the Matanel Foundation. This charitable institution encourages social entrepreneurship and is a testament to Mrs. Aflalo's sense of responsibility, spirituality, dedication to philanthropy, and constant desire to help create a better world.



Prof. Armen Darbinyan, Chairman of the Board, Rector of the Russian–Armenian University, Yerevan, Armenia

Prof. Darbinyan is an initiator of economic and political reforms in Armenia, including the development of the private sector and the formation of new governmental institutions. He led important reforms in the fields of telecommunication, agriculture, infrastructure and tourism. In addition, he is the author of national legislation regarding banking, stock companies, anti-trust provisions, and state regulation of public services. He is renowned as an international expert on transition economies and was granted the Young Global Leader award by the World Economic Forum.



#### Dr. Simeon Diankov, Senior Fellow, Visiting Professor, London School of Economics

Dr. Djankov was deputy prime minister and minister of finance of Bulgaria from 2009 to 2013. Prior to his cabinet appointment, Djankov was chief economist of the finance and private sector vice presidency of the World Bank, as well as senior director for development economics. In his 17 years at the Bank, he worked on regional trade agreements in North Africa, enterprise restructuring and privatization in transition economies, corporate governance in East Asia, and regulatory. Dr. Djankov was declared "Bulgaria's Most Successful Politician" and awarded the President's Award of the World Bank.



#### Prof. Sergei K. Dubinin, Member of VTB Capital Supervisory Board, Russia

Prof. Dubinin is an economist and professor at Lomonosov Moscow State University. In addition to positions in the Russian government, he served as chairman of the Russian Central Bank from 1995-1998. In addition, he has served on the board of governors of several banks and leading financial institutions.



#### Prof. Jacob A. Frenkel, Chairman, TAU Board of Governors, former Governor of the Bank of Israel

Prof. Jacob A. Frenkel serves as the chairman of the TAU Board of Governors and chairman of JPMorgan Chase International. In addition, he serves as Chairman of the Board of Trustees of the Group of Thirty (G-30), a private, non-profit, consultative group on international economic and monetary affairs. In addition to filling executive positions for international investment and financial services companies, Prof. Frenkel is also the former head of the Bank of Israel.



#### Hon. Václav Klaus, Former President of the Czech Republic, Head of the Václav Klaus Institute

An economist by training, Prof. Klaus was forced out of the Czechoslovak Academy of Sciences after the Soviet invasion in 1968. He returned after the Velvet Revolution of 1989 as one of the founders of the Civic Forum Movement. He was the country's first non-Communist Finance Minister and served from 1992 to 1997 as Prime Minister of the Czech Republic. In 2003 Klaus was elected President of the Czech Republic and won reelection in 2008. Since 2012 he has headed the institute which bears his name, a think tank based in the Czech Republic. He is a member of the Mont Pelerin Society, has published more than 30 books, and is the recipient of numerous honorary degrees and international awards.



#### Igor Luksic, Former Prime Minister of Montenegro, Founder and Member of the Board of the Institute for Security of Montenegro

Mr. Luksic was an official candidate for the position of UN Secretary General in 2016 and served as Prime Minister of Montenegro from 2010-2012, Deputy Prime Minister and Minister of Foreign Affairs and European Integration from 2012-2016, Minister of Finance from 2004-2010, Member of the Parliament of Serbia and Montenegro from 2003-2006 and Member of the Parliament of Montenegro from 2001-2003. Today, Luksic is the south-east Europe public sector director of PwC. Dr. Luksic holds a Ph.D. in economics and is an associate professor at the University of Donja Gorica Podgorica (UDG). Dr. Luksic is an advocate for transparency and dialogue in a proactive approach to both internal and foreign relations. During his time as Prime Minister, Montenegro opened accession talks with the EU and completed accession to the WTO.



#### Prof. Itamar Rabinovich, Founder and President of the Israel Institute, Former Ambassador of Israel to USA and President Emeritus of TAU

Prof. Itamar Rabinovich is the president of the Israel Institute (Washington and Jerusalem), Israel's former Ambassador to the United States and the former president of Tel Aviv University (1999-2007). He is professor emeritus of Middle Eastern History at Tel Aviv University, Distinguished Global Professor at NYU and a Distinguished Fellow at the Brookings Institution. Prof. Rabinovich has been a member of Tel Aviv University's faculty since 1971 and served as the Ettinger Professor of the Contemporary History of the Middle East, chairman of the Department of Middle Eastern Studies, director of the Dayan Center for Middle Eastern and African Studies, Dean of the Humanities Faculty, and Rector. Prof. Rabinovich's book "Syrian Requiem" was recently published by Princeton University Press: https://press.princeton.edu/books/hardcover/9780691193311/syrian-requiem



#### Seppo Remes, Co-Founder and Chairman of the Board, EOS Russia

Mr. Remes is a Finnish citizen and holds a Licentiate of Economics degree from the Turku School of Economics. Working in Russia from 1993-2015, he is the former CEO of the Investment Company Vostok Energo and director of Vostok Nafta, both of which operate in the Russian energy sector. He was selected as the Director of the Year in 2013 by the Independent Directors' Association and the Russian Council of Industrialists and Entrepreneurs. In 2007 he was among the founders of the EOS investment firm and has been company chairman since its inception. He was awarded an honorary Doctorate from the Plekhanov Academy of Economics in Moscow and Turku School of Economics in Finland. He was member of Boards of UES, Rusnano, Rosseti, OMZ, Sollers and Sibur Holding.

#### Management



Prof. Itai Sened, Head of BMI, Dean of the Gershon H. Gordon Faculty of Social Sciences

Prof. Sened is the new Dean of the Gordon Faculty of Social Sciences at Tel Aviv University and founding head of the Boris Mints Institute for Strategic Policy Solution to Global Challenges and the Academic Institute for Structural Reforms.



**Dr. Alexander Pesov**, Representative of BMI President

Dr. Pesov hold a Ph.D. in biology and is the author of several scientific publications. Dr. Pesov has previously worked as a journalist, writer, and editor of several top journals and newspapers and served as vice president of the International Press Center in Moscow. From 1998 to 2012 Dr. Pesov was an advisor to the prime minister of the Russian Federation Eugene Primakov, chief of staff of the Ministry of Agriculture of the Russian Federation and vice governor of the Voronezh region.



#### Dr. Haim Ben-Yaakov, Representative of TAU President

Ben-Yaakov is a senior executive for regional development and public affairs at Tel Aviv University. He served as CEO of the Euro-Asian Jewish Congress, head of the Jewish Agency for Israel in Russia and the Baltic States and as an educational adviser for the Jewish Agency for Israel.



#### Yuri Ratomski, Administrative Director of BMI

Yuri specializes in creating, developing, and managing multidisciplinary and multidimensional initiatives incorporating human resources and physical infrastructure. Adviser to several governmental organizations and large corporations regarding strategic development and robust solutions. Formerly the business development manager for S-Molcho and the project manager for Bat-Yam's Economic Development Company, Yuri holds a bachelor's degree (OU) and a master's in Government Administration and Public Policy from Tel Aviv University.

### RESEARCH

Each of our research labs is comprised of a Lab Leader – a senior TAU faculty member who is an expert in the relevant field, and a group of research students under his/her supervision. BMI labs are the operative channel of co-operation with BMI's partners, both within TAU and international partners. The research seeds BMI has sown have grown into academic and policy publications, international academic collaborations and additional funds from several foundations and sources.



## **Water Lab**

#### In collaboration with the Water Center at TAU

#### **Lab Heads:**



Prof. Dror Avisar, Head of TAU Water Center, Faculty of Exact Sciences



**Prof. Hadas Mamane,**Head of the Environmental Engineering Program,
Faculty of Engineering

Prof. Hadas Mamane and PhD student Dana Pousty had won the Merage DeserTech competition in the water technology category with SoLED technology – off the grid no chemical disinfection in rural communities in the desert.



#### Ariel Aviram, BMI Fellow

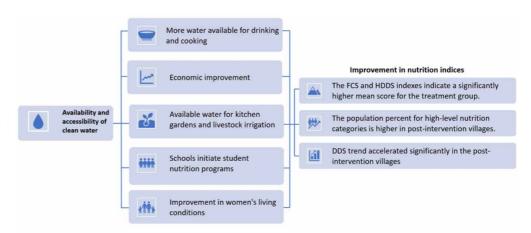
Academic Advisor: Prof. Hadas Mamane, Faculty of Engineering

#### Research project: Impact evaluation of iA water-wells intervention on the dietary intake and drinking water consumption in rural communities in Tanzania

Water and nutrition insecurity are linked problems faced by most developing countries. Despite their many linkages, they have traditionally been treated and studied as independent challenges. Only a few studies have examined the extent to which these two

factors are related and how accessibility and availability of clean water influenced the household's level of nutrition security in lower-income countries. This study examines the impact of clean water availability and accessibility on nutrition security. A study evaluating the impact of water accessibility on dietary intake via projects were conducted by Innovation Africa (iA) in the Dodoma region, Tanzania. Four villages that implemented water accessibility projects through intervention projects were selected to represent the treatment group. Additionally, four comparison villages without water accessibility intervention projects were chosen to represent the control group. Four hundred thirty-six households were surveyed quantitatively, and thirty-four in-depth interviews were conducted with village leaders and key players. Clean water availability and accessibility have been leveled by time distance to water resources. Finalizing the results, the researchers may conclude that the following five casual links may explain how clean water accessibility affects nutrition

indices, according to the interviews. 1) Water availability increases cooking and increases various food and meals; 2) Water availability leads to an economic improvement allowing households to purchase varied food; 3) Asfemale living conditions improve following the intervention, the household nutrition security improves; 4) iA borehole provides a continuous and available water source for kitchen gardens and livestock irrigation; 5) The intervention encourages schools in the area to develop student nutrition programs.





#### Eitan Yosef Benson, BMI Fellow

Academic Advisor: Prof. Hadas Mamane, Faculty of Engineering

Research project: Heavy Metal Contamination in Developing Countries & Affordable Selfmaintaining Ultrafiltration Home Water Treatment

Eitan's research focus is the Kodaikanal valley, a perfect – if not wholly contained – case of industrial ecocide, manifesting many of the negative forces tragically present in the modern world: corporate negligence; poorly thought-out policy; an insufficient

framework for policy enforcement; municipal corruption; blatant greenwashing; legal obfuscation; and crucially continuing disastrous contamination with mercury. The valley contained a thermometer factory belonging to Hindustan Unilever, which was found in the late 90s to have been dumping massive amounts of Hg-contaminated waste in the surrounding forest. The case has been taken to court numerous times over the last two decades, including an undisclosed settlement to several hundred plaintiffs in 2016. No cleanup operations have been proposed to date, despite recent evidence that the level of contamination – and therefore the damage being wrought on the ecosystem and Human community within it – continues to increase. Eitan is managing three concurrent sub-projects related to Kodaikanal:

#### 1. Wide-ranging study of the current state of contamination

Eitan is collaborating with a local conservation organization and IIT Madras (the highest ranked university in India) to ascertain accurate mercury levels in the soil and water around Kodaikanal. In 2019, he collected data in the field indicating that mercury contamination has not decreased in over a decade, which forms the preliminary results of the research subproject currently underway in Kodaikanal. This will be published when data has been collected and validated and will serve as the basis of a case filed by activists in the Madras high court for the Tamil Nadu Pollution Control Board to review the Kodaikanal ruling.

#### Recyclable Selective Filter

The mercury concentrations in the water of Kodaikanal lake are likely to be on the order of 6-600 ppb. While these are extremely low compared to the other natural organic material in the water, they are high enough to cause extensive mutagenesis and therefore necessitate removal. Removing a contaminant present at such low concentrations, in such a large volume of water, with such high concentrations of non-dangerous material, is a fundamental question for remedying industrial pollution generally. This subproject forms most of his actual research work, where Eitan is developing a new type of water treatment technology called an *ex situ* reactive medium. Essentially, a highly pollutant-selective adsorptive material is coated on the interior surface of an open cell metal foam, and the influent is pumped through. He has already developed a novel metal-organic framework

(MOF) material capable of achieving this, which Eitan is submitting for publication. Other varieties include gold-coated materials, both on naked metal foams of various kinds and on highly physical-sorptive materials as well, such as a silica aerogel material, which constitutes a further project in collaboration with IIT Madras. The work with IIT, developing the gold-coated silica aerogel and investigating the lake, will include a two-month research trip later this year.

#### Device development for water cleaning

As part of the research Eitan completed in India in 2019 with the Nitsan lab, it became apparent that while ultrafiltration technologies are incredibly affordable means of removing biological contamination from low turbidity water, their requirement to be cleaned regularly invalidates them as ultraaffordable devices. To solve this problem, the fellow developed a new device to simultaneously measure when a filter needs cleaning, then operate the cleaning procedure. All of this is achieved mechanically, without needing any electrical components, massively reducing the price. The device is also designed to be assembled with no special training or equipment, democratizing the supply chain. Theoretically, the means of production required to scale this project are entirely distributable, and thus a distributable community token might be used to optimize its growth in the field.



#### Yosef Perlmutter, BMI Fellow

Academic Advisor: Prof. Hadas Mamane, Faculty of Engineering

#### Research project: Decentralized wastewater treatment method adequate to reuse for irrigation of edible crops

The statistics are known – half of the world population suffers from poor access to sanitation, and 4 billion people are subject to water scarcity for at least one month a year. Those who suffer most are marginalized. In 2020, two billion people lacked access to

uncontaminated water. There are economic and environmental benefits from the reuse of treated wastewater in agriculture and food production under scarcity conditions, mainly through Conservation of freshwater sources creating higher agricultural productivity through the reuse of nutrient-saturated treated wastewater and reduced discharge of nutrients into surface and groundwater; benefits that can produce positive social and financial impacts (Kumar & Tortajada, 2020). Furthermore, suppose such integrated food-energy-water systems could be scaled down to make them technologically feasible and economically viable. In that case, the significant capital investment associated with a centralized model for food-energy-water production and conveyance can be reduced, increasing affordability. An essential component of our solution is using 3D-printed biodegradable carriers made of bioplastic (PLA – corn starch filament). Research and development are done in a joint venture with THAPAR and PAU universities in Punjab, India. The carriers enhance a natural process of biological treatment in wastewater ponds. Yosef conducted a series of comparative experiments with different models of 3D printed carriers, assessing the influence of various shapes, proportions, and volume-to-surface area ratios. The carriers were designed and printed at Prof. Hadas Mamane's lab using FDM 3D printers (Flashforge Adventure 3). Some experiments have been done at TAU and some at Thapar University. The critical parameters of the wastewater were examined, including BOD, COD, DO, TDS, TSS, conductivity, pH, Nitrate, Phosphorus, and Chlorophyll concentrations. These parameters were then compared with Punjab's official criteria for allowed concentrations of different pollutants (both organic and non-organic). In the current process that Yosef has been working on, there is no need for an energy source to turbo-flow the wastewater in the process, as the algae provide sufficient oxidation. He wishes to analyze the energy balance of the treatment process and then try to optimize that solution by involving renewable energy solutions that may increase the algal growth.





Research project: Novel UV-LED water disinfection technology characterization using CFD and optical simulations.

Water-borne diseases caused by different microorganisms are still prevalent in low-income countries due to the consumption of raw water or water that was not appropriately disinfected. This is the situation for over 2 billion people worldwide. The use of

UV mercury lamps, low or medium pressure (LP/MP), to disinfect water is broadly used worldwide, and its effects are known and well-founded. There has been a significant development in UV-LED water disinfection technology in recent years with some promising results. The main advantages of UV-LED compared with the LP/MP Lamps are that the LED is more robust, does not contain any hazardous materials, and can be designed to emit a more comprehensive range of UV wavelengths (as opposed to LP/MP, which emits only one wavelength) with different inactivation properties. This research focuses on the latter advantage. Recently, in Prof. Hadas Mamane's water and energy Lab, it was discovered that the combination of certain wavelengths in specific irradiations has a synergetic disinfection effect, meaning that it achieves the same inactivation much faster than the additive effect of each wavelength stand-alone while slowing down reactivation process. This synergetic effect is yet to be characterized, and it is not yet known what the needed wavelengths and irradiation combinations are to utilize in different reactor designs. The purpose of this research is to deeply examine the said effect using CFD and optical simulations, recreating the experiment in which the effect was discovered, and following the path of microorganisms through the water and UV light to try and induct the conditions needed in a future UV-LED reactor. Unfortunately, today the UV-LED efficiency is relatively low (2-10% approx.), so the electric energy consumption is inferior compared to LP/MP. Despite that, the lower exposure time required can prove energy superior in a system context, in which less energy will be wasted on flow direction and deceleration. That said, recent articles show a promising improvement in UV-LED efficiency now that the need has risen.

# **Inequality Lab**



Lab Head:

**Prof. Itai Sened,** Dean of the Gordon Faculty of Social Sciences and Head of BMI



**Eve Guterman**, BMI Fellow

Academic Advisor: Prof. Itai Sened, Dean, Faculty of Social Sciences

Research project: The Monopolies Behind the Wicked Problems: Decentralizing **Institutions for Equality** 

The case study for Eve's doctoral research is currently in progress in Kenya. The first intervention stage was conducted on June 1, 2022, and Eve has already collected six months of data for our 611 participants in Kitui, Kenya, in partnership with Grassroots

Economics and the World Food Program. What follows is a progress update and brief summary of this randomized control trial. Chamas (10-30 member savings and lending groups, or table banks) will act as the base unit within villages of ~400 households. Chamas have existing governance structures, basic financial literacy, and long regular meetings and conflict resolution histories. Of the 116 chamas in Kitui, Kenya, 32 groups will be selected for participation in the study. Members of these chamas (and select non-members) will keep financial diaries for 12 months, recording their daily spending (611 individuals). This period began in December of 2021 and will continue through December 2022. The 32 chosen chamas are of similar sizes, with comparable gender breakdowns. Each chamas offers similar financial services and has comparable credit cycles and interest rates. Members have a comparable economic activity to compare changes in individual spending and consumption after the treatment. The chosen chamas were randomly assigned to one of three cohorts. Alongside the individual financial diaries, the study includes a screening survey at the chama level to determine randomized participation and baseline, midline, and endline panel surveys. The baseline survey was conducted in November 2021, and the midline survey was carried out in May 2022. The endline survey will be carried out at the end of the experiment in December 2022. The analysis will rely on both financial diary network analysis and regression analysis of the survey panel data.



## **Conflict Resolution Lab**

In collaboration with the Evens Program in Mediation and Conflict Management and the Academic Institute for Structural Reforms



Lab Head:

Dr. Sami Miaari, Department of Labor Studies,
Faculty of Social Sciences



#### Dr. Boaz Hameiri, BMI Researcher

#### Research assistants: Noy Kalif, Yasmeen Shamshoum

Dr. Hameiri developed, together with Samantha Moore-Berg (a postdoctoral fellow at the University of Pennsylvania), a comprehensive theoretical account for what is termed intervention tournaments, with a paper recently accepted for publication in the highly prestigious psychological journal Perspectives on Psychological Science (Hameiri & Moore-Berg, 2022). Dr. Hameiri is currently involved in several research projects that are based on the top-down approach. One example is a project Dr. Hameiri is leading with Daniel Bar-Tal and Nimrod Rosler (Tel Aviv University), and Keren Sharvit (University of Haifa), in which the scholars are developing

a new intervention they termed the Informative Process Model (IPM). In a nutshell, IPM includes facilitating unfreezing and attitude change through informing individuals about the socio-psychological processes through which conflict-supporting narratives develop and suggesting that they can change via comparison to similar conflicts that have been resolved peacefully. One paper from this project was very recently accepted for publication (Rosler et al., in press, Frontiers in Psychology). Gal Factor was heavily involved in this project until a few months ago, until he decided to end his tenure at Tel Aviv University. Dr. Hameiri's other work includes interventions to reduce prejudice and dehumanization toward Central American immigrants and Muslims among Americans – several papers are in press or progress regarding this subject. Another remarkable project currently in preparation in collaboration with Rebecca Littman and Alexandra Scacco (WZB Berlin Social Science Center), among others, examines the role of education entertainment in promoting better intergroup relations between Christians and Muslims in Nigeria. Furthermore, together with Nechumi Yaffe (Tel Aviv University), Dr. Hameiri is working with an Israeli organization, Gesher, to assess their intervention that aims to promote better intergroup relations between secular and ultra-religious (Haredi) Jews in a large-scale field experiment in dozens of high schools throughout Israel. Finally, the fellow is currently engaged in several research projects that examine the effects of the tendency for interpersonal victimhood on interpersonal and intergroup relations. First, in an ongoing project conducted with current and former MA students in the lab, Gal Factor and Noy Calif, they found effects that personality traits have on interpersonal relations and the willingness to help others in need. Second, in collaboration with Yossi Maaravi and Tamar Gur (a Ph.D. student at the Hebrew University), Dr. Hameiri showed that trait victimhood is negatively associated with entrepreneurial tendencies (Maaravi, Hameiri, & Gur, 2022, Frontiers in Psychology). Finally, in a project that yielded one paper that is under review, and another that is currently in the writing stage, in collaboration with several researchers, including Samantha Moore-Berg, Emile Bruneau and Emily Falk (University of Pennsylvania), Smadar Cohen-Chen (University of Sussex), Rebecca Littman, and Nechumi Yaffe, the scholars found that the tendency for interpersonal victimhood served as a strong driver of support for, and willingness to engage in, political violence in various contexts. To support this ongoing project, which is in collaboration with Rebecca Littman and Opeyemi Adeojo (a local Nigerian researcher) and the NGO, Beyond Conflict, the Facebook Foundational Integrity and Impact Research Grant were obtained. More recently, based on a similar approach, a project that is in its early stages in collaboration with Rebecca Littman and Beyond Conflict, using a bottom-up approach, they are trying to better understand the psychological drivers of political violence among Jews and Arabs in Israel as a steppingstone for the potential development of media interventions. Yasmeen Shamshum has been integral to this project since she joined the lab.



#### Dr. Nadine Knab, BMI Postdoctoral Fellow

Academic Advisor: Dr. Boaz Hameiri, School of Social and Policy Studies

Research project: A wolf in sheep's clothing? The interplay of norms and threat in hierarchy-maintaining actions towards disadvantaged groups

Reactions of host society members towards the record high number of refugees were often portrayed as polarized and divided between people who help refugees and people who show discrimination against refugees. What if people helping refugees

(or disadvantaged groups more generally) might not be so (psychologically) different from people who exert discrimination towards refugees and disadvantaged groups? Helping as a concept inherently entails unequal power relations, as the help provider has resourced the help recipient does not have. Thus, Nadine argues that helping – as well as – discrimination can lead to the maintenance of power relations. This is the case when helping is done in a dependency-oriented manner, which means that the help recipient will depend on the help the provider offers. Nadine conducted two studies with promising results. One study was conducted in Israel and the other in Germany. The data shows that when people experience a higher amount of threat from refugees (measured by direct threat: cultural threat, economic threat, and safety threat) but strong norms to help refugees, they tend to offer dependency-oriented help (help that maintains hierarchies). Also, the Handbook on Peace Psychology is finished with the layout's first 20 (out of 60) chapters and will soon be ready to be published. Dr. Knaab was also awarded the German Thesis Award for her work.

#### **Recent Publications:**

• Knab, N., & Steffens, M. C. (2022). "Why do you think Christmas will never ever be celebrated again?" A paradoxical thinking intervention's potential to affect conflict-related concerns, willingness to compromise, and openness towards refugees. European Journal of Social Psychology, 52(3), 500-514. https://doi.org/10.1002/ejsp.2833

#### Nora Meissner, BMI Fellow

Academic Advisor: Prof. Adriana Kemp, Head of the School for Social and Policy Studies

Research projects: Refugees in town: assessing the "local turn" of forced migrants' integration; The first year of the COVID-19 pandemic: Examining civil society's crisis responses for refugees and asylum seekers in Israel

Currently, Nora is conducting follow-up interviews with civil society organizations and municipal bodies in different localities in Israel (Study 2) to expand on the findings of in-depth analysis for research publication. Additionally, she is reviewing scholarly literature around the notions of organizations and solidarity in crises, resilience practices, and relationship dynamics in the field of forced migration and governance of migration for academic publication based on Study 2. Lastly, she also participated in a workshop at TAU and a field visit to Haifa and civil society organizations in May 2022 in the framework of a visit by Prof. Tanja Müller (Manchester University) as part of project development on "Inscribing Mobile Lives into the urban peripheries of global displacement." She has a visit planned for October 2022 in Manchester. The collaboration is part of the TAU/ Manchester competitive grant awarded to both PIs for drafting a joint research proposal.

#### Outcomes

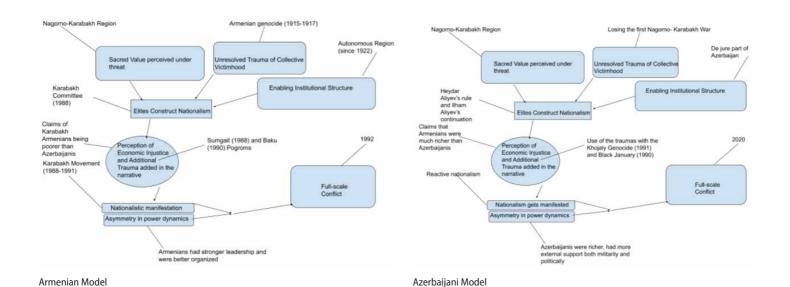
- 1. Kemp, A. with Meissner, N. (2020). Paradoxes of control: Incorporating precarious migrants in Tel Aviv in times of restrictive migration policies. In: Feniger et al. The Routledge Handbook of the Contemporary Israel, Routledge (forthcoming).
- 2. Presentation at BMI Conference May 2022: "Adaptation, Sustainability, and Resilience among Organizations working with African Asylum Seekers in Israel during the COVID-19 pandemic"
- 3. Blog entry: "Transcribing mobile lives into urban spaces: observations from Haifa" (June 24, 2022). Link: http://blog.gdi.manchester.ac.uk/transcribingmobile-lives-into-urban-spaces-observation s-from-haifa/

#### Petr Pesov, BMI Fellow

Academic Advisors: Prof. Itai Sened, Dean, Faculty of Social Sciences & Prof. Udi Sommer, Department of Political Science

Research project: Roots of the Nagorno-Karabakh Conflict: Towards an Escalatory **Process Model** 

Throughout the past year Petr has been working on his MA thesis, dealing with a case study of the Nagorno-Karabakh Conflict between Armenia and Azerbaijan following the Second Nagorno-Karabakh war of 2020. By various scholars, the Nagorno-Karabakh conflict can be considered: intractable, frozen, religious, ethnic, interstate, intrastate, extra-state, over territory, and values, and this is just to name a few. This shows the first gap in knowledge – the fact that scholars cannot agree on what type of conflict this is. Scholars also cannot pinpoint what exactly caused it and the most common themes identified in the research are institutions and policies of the Soviet era that led to nationalism, religious and cultural differences, leadership that induced nationalism, economic cleavages, power asymmetries, and traumas and looked at each element separately, without trying to establish a connection between them. The same can be seen when looking at theory – each school of thought only considers one element, at most – its relation to another. Combining these theoretic elements into a model framework, they see that a conflict should have three preconditions: enabling institutions, sacred values under threat, and past trauma. After which, the nationalism formation process takes place with elements of additional trauma and perception of economic injustice. As a result, nationalistic manifestations result in power asymmetry, either physical or moral, which catalyzes the start of wars. This model was tested empirically twice through data gathered from leading experts and policy/decision makers of the region. This included former prime ministers, ambassadors, former and acting members of parliament, and other officials, as well as academics from both Armenia and Azerbaijan. Both times the model gathered support. It is possible to deduce that if preconditions such as collective victimhood, sacred values under threat, and institutions that enable the conflict and rise in nationalism can be pinpointed and manipulated, many conflicts could be prevented. Other conclusions that arose included that Azerbaijani scholars believed that their collective identity was relatively new and could not be kept through centuries like Armenia due to the absence of religious institutions like the Armenian church that kept the memory of everything through generations and beyond. Furthermore, Azerbaijanis are a more multiethnic country than Armenia, and experts pointed to the fact that their nationalism was much more civic than the Armenians, which was ethnic. Lastly, the two sides perceive conflict differently – Armenians see it as an issue of self-determination, while Azeris believe in the territorial integrity principle. Prior to defending and submitting his thesis, Petr presented it at the Annual BMI Conference on May 12th, 2022. In his future work – the main goal is to create an interdisciplinary conflict typology, so conflicts can not only be analyzed but also categorized and dealt with in a suitable way by looking at past examples of conflict resolution. This is another massive gap in academic literature he plans to contribute to his Ph.D. dissertation. He has already completed a similar interview sample for the Israeli Palestinian and Kashmiri conflicts and hopes to continue doing more work in the field.





# Renewable Energy Lab

In collaboration with the Renewable Energy Center

#### **Lab Heads:**



Prof. Yossi Rozenwaks, Dean of the Faculty of Engineering



**Prof. Abraham Kribus, Faculty of Engineering** 



**Eyal Sasson**, BMI Fellow

Academic Advisor: Prof. Itai Sened, Dean, Faculty of Social Sciences

#### Research project: The Role of Microgrids in the Transition of Electricity Markets to Zero-**Carbon Competitive Markets**

This study uses a time-series dataset to examine the policy instruments implemented to support the deployment of renewable energy in five developed countries considered a pioneer in the solar energy area since the early 1990s: Australia, New Zealand,

Spain, Italy, and California. Israel, which only recently began developing a reform in the electricity market, serves as a point of reference in this comparison. To date, Eyal began introducing the literature review of small-scale microgrids, focusing on technologies available today. Specifically, he focuses on the worldwide small-scale microgrids which are most suitable and can easily be implemented in Israel. Regarding the current research about small-

scale energy storage (in collaboration with the Araba Institute for Environmental Studies and KKL), Eyal submitted a mid-year report focusing on the social barriers to implementing small-scale energy storage systems. A social survey conducted in Eilat and Eilot indicates that 80% of the respondents in the survey consent to installing storage systems outside the city or settlement. However, However, when asked if they would agree to install storage systems at the residence, 30% of them objected. Additionally, the researchers found that most respondents are unfamiliar with the term 'storage energy'. Only 19% of the respondents are well-informed regarding the advantages and disadvantages of energy storage technology, and 38% might be concerned that energy storage systems can threaten their health. Eyal concluded that more extensive efforts are needed in public participation to increase awareness of the benefits of energy storage.

	strongly disagree	disagree	neutral	agree	strongly agree
Without energy storage, we will not be able to use RE at night	2%	18%	38%	26%	16%
I consider myself to be well-informed regarding the advantages and disadvantages of energy storage technology	20%	28%	33%	14%	5%
I think energy storage facilities have negative effects on the region's landscape.	18%	29%	43%	9%	1%
I am concerned that energy storage systems can pose a threat to my health	30%	31%	31%	7%	0%

Table. 1. Residents' concerns regarding installing storage systems

# **Demography Lab**



Lab Head: Dr. Isaac Sasson, Department of Anthropology and Sociology



#### Dr. Shayna Bernstein, Postdoctoral BMI Fellow

Academic Advisor: Dr. Isaac Sasson, Department of Anthropology and Sociology

### **Research project: Social Inequalities in Mortality**

This semester Shayna participated in the virtual international workshop "Stochasticity in the life cycle: From individuals to populations" hosted by the Lorentz Centre in The Netherlands. The workshop was invite-only, limited to about 30 participants, and had an interdisciplinary range of topics with interactive sessions. In March, she was invited to present at the Population

Association of America (PAA) annual meeting in the session entitled "Understudied contributors to mortality". She presented her work "Black and white racial differences in expected survival: Optimism drives the racial anomaly". The discussant in the session provided Dr. Bernstein with valuable feedback on our research and manuscript. Especially the perspective that positive qualities and advantages minorities experience in late life are often overlooked. For instance, black Americans in late life tend to have better developed psychological and sociological coping mechanisms and infrastructure than their white counterparts. She incorporated supporting research with this perspective into our manuscript and plan to submit our article to Social Science and Medicine-Population Health by the end of the month. She has also applied to the "Healthy Longevity Center Fellowship" to support Dr. Bernstein's research for the next year partially. Below is part of her proposal: Expectations of survival are directly related to the quality of life in old and late-old ages. More extended perceived longevity has been linked to less depression (Bergman & Segel-Karpas, 2020) and a greater 'sense of control', which has been shown, among other benefits, to subdue biological stress reactions (Mirowsky, 1997). Our project elucidates black and white racial differences in expectations and attitudes towards mortality. For example, it was observed that, on average, blacks become more hopeful and whites become more pessimistic about their survival chances as they age. It is essential to consider different attitudes towards death and the aging process, and black and white racial differences are particularly insightful to understanding how different life course experiences shape late life expectations. Perhaps the optimism in survival that black males experience in old age is due to the feeling that they have a selective advantage (Bulanda & Zhang, 2009). Having survived longer than many of their peers and through more hardships than their white counterparts, mid-aged black men might assume they have excellent survival chances hence an optimistic outlook. Whether or not the expectation of survival is accurate, individuals internalize their beliefs and act on them regardless of official demographic projections. Hence, survival expectations are strategically relevant for Aging as it reflects when an individual believes they will live, given their unique life history, and impacts their psychosocial and economic experience at the end of life. In this measure, black and white racial differences reveal racial differences in the end-of-life experience.



Atalia Regev, BMI Fellow

Academic Advisor: Dr. Isaac Sasson, Department of Anthropology and Sociology

Research project: The different trajectories in which childhood socioeconomic status (cSES) shapes older adults' expected lifespan

During the last half-century, the gaps in health and life expectancy by income and education achievements have been widening, specifically in developed countries such as the U.S (Chetty et al., 2016; Mackenbach, 2012; Marmot, 2003; Phelan et al., 2010;

Sasson & Hayward, 2019). However, the current study aims to go beyond death rates toward living individuals' survival expectations regarding their own life course experiences. Doing so may give the researchers a deeper understanding of the objective mortality trends and the subjective longevity perceptions of the least advantaged ones in the current era. Likewise, it may shed some light on fundamental questions concerning the complex and reciprocal relationships between cumulative life chances, the biological body, expectations, and practices. In Particular, this research project aims to examine whether and how childhood socioeconomic status (cSES) shapes subjective survival expectations (SSE) in midlife. The study will pay particular attention to the pathways through which childhood SES might be related to subjective survival expectations later in life, variation in this relationship throughout the aging process, and how childhood SES is operationalized.

After preparing the data for statistical analysis and testing some basic versions of the statistical model in the fall semester, Atalia applied further fundamental statistical operations in the spring semester. Specifically, she has been working on missing data imputations, adjusting sampling weights for hierarchical linear regression in longitudinal studies, examining cross-sectional regressions, and preparing data for possible further analysis, as detailed below. As stated, in the first analysis, she assessed the different pathways in which cSES shapes SSE by running five nested hierarchical linear regression models separately for males and females. When adding the interaction effect between cSES and age, neither the interaction nor the main effects were significant. However, analyzing without the interaction coefficient produced results that suggest that some different childhood socioeconomic status indicators have different statistical associations with subjective probabilities of living to age 85 or more. In other words, although cSES does not affect the slope, it does affect the intercept, net other variables (such as demographic confounders, adulthood socioeconomic status, current health, and parents' life status), and after multiple imputations process for missing values. Regarding these results, she also ran nested models of ordinary least squares regression (OLS) for cross-sectional data. The data for this analysis were retrieved from early baby boomer respondents who participated in the HRS study in 2006 and were aged 52-56(N=2,288) during this wave. This analysis' results suggest too that some different childhood socioeconomic status indicators have different statistical associations with subjective probabilities of living to age 85 or more. In the final stage of the study, during the coming month, she will be working on comparing the effects of cSES on SSE across different cohort samples. She intends to do so by running the same five nested models mentioned above for respondents who were asked the same question (the percent chance to be 85 or more (and were at the same age (52-56) In previous or following waves - HRS (born 1937-1941, wave 2), WB (born 1942-1947, wave 4), MBB (born 1954-1959, wave 10), LBB (born 1960-1965, wave 13). She will compare the cSES coefficients in the basic model (with only demographic confounders), the aSES model (with adulthood socioeconomic), and the full model.

# Sustainable Development Lab



Lab Head:

Dr. Ram Fishman,

Department of Public Policy

Following the prolific work and activity of the Sustainable Development lab – TAU has opened a **new Master's of Arts program in Developing Countries**. The program is led by Prof. Tami Ronen-Rosenbaum, the outgoing dean of the Faculty of Social Sciences. For more information visit: https://en-social-sciences.tau.ac.il/devcoun

Dr. Fishman is continuing his research and makes substantial impact: https://www.bmiglobalsolutions.org/single-post/two-articles-about-dr-ram-fishman-s-research https://www.nitsan.sites.tau.ac.il/

## >>> RESEARCH UPDATES AND GRADUATING FELLOWS

We are Proud to have supported the following fellows who have successfully Graduated:
Ariel Aviram, Water Security (MA)
Atalia Regev, Demography (MA)
Eyal Sasson, Renewable Energy (MA)
Petr Pesov, Conflict Resolution (MA)

## **THE 2021 BMI PRIZE** | OCTOBER 17<sup>th</sup>, 2021



**Dr. John N. Nkengasong**, Director, CDC Africa, for his efforts to combat the COVID-19 Pandemic in Africa.

The Boris Mints Institute was founded to encourage research, planning, and innovative thinking to promote significant positive change in the world. BMI focuses on finding feasible strategic solutions to provide strategic plans and innovative projects to enhance the welfare of communities around the globe. Starting in 2017, BMI awards a \$100,000 prize to an exceptional individual who has devoted his/her research and academic life to the solution of a global strategic challenge and whose research, public action, and ideas had transformative impacts on global policy formation and a proven contribution to the welfare of a significant number of communities worldwide.

BMI held a virtual Award Ceremony to give the annual BMI Prize to Dr. John N. Nkengasong, Director, CDC Africa, for his efforts to combat the COVID-19 Pandemic in Africa.

In his speech, Dr. Nkengasong provided a unique insight into the many complexities he faced as the navigator of the pandemic policy in Africa and the dilemmas he encountered in attempting to create holistic solutions for vaccination and treatment of COVID-19.

Watch the speech here: https://bmiglobalsolutions.org/the-bmi-prize-2021-awarding/

### **BMI ANNUAL RESEARCH CONFERENCE** | MAY 11-12, 2022

In the past two years, humanity has faced two distinct challenges – the COVID-19 pandemic and the invasion of Ukraine by the Russian Federation. Despite being from different sectors – health and conflict resolution – these challenges have disastrous effects on people worldwide. Further, both cases' outcomes suggest leaders' inability to confront global challenges in the 21st century (as well as the inefficiency of international institutions). Here, we need academics and experts to understand how the problems affect the global population and what can be done policy-wise to combat them.

The Boris Mints Institute 7th Annual Research Conference organized four impressive panels of renowned scholars, decision-makers, and students to address this in response to crises and global environmental changes. The experts discussed the effect of sanctions on Russia and how they affect the world, as well as the diplomatic consequences of the war in countries like Europe and the Middle East, practical solutions to the global water scarcity and quality challenge, and some insights on refugees and conflict from an interdisciplinary perspective. This year's conference was well-received, presenting opinions and suggestions on dealing with the global challenges that we face today. While not all projects and presentations addressed the challenges above, they all aimed to solve global problems with the policy.

Watch the conference here: https://bmiglobalsolutions.org/bmi-conference-may-22/



### **>>>** BMI WEBINARS

#### Israel after the Afghanistan Crisis: The New Geopolitics of the Middle East, October 28th, 2021

Which regional and international powers will fill the vacuum created by the withdrawal of the US from Afghanistan? How would these changes affect Israel? Would the US debacle in Kabul encourage Iran to increase its efforts to enrich uranium to a higher level? Would Iran's proxies Hezbollah and Hamas escalate the struggle against Israel? Does the long-term consequence of the United States' withdrawal from Afghanistan indicate a global shift away from US involvement in Middle East affairs, including decreasing military presence and investment of financial resources? Moreover, would such a possible transition weaken U.S.-Israel relations, particularly considering the Iranian challenge, or would the US-Israel alliance be strengthened? This webinar was coorganized with Northwestern University.



Watch the webinar here: https://bmiglobalsolutions.org/northwestern-webinar/



#### Future of Democratic and Economic Institutions, November 10th, 2021

BMI and the University of Vienna brought together leading academics and policymakers to discuss one of the most pressing issues in the world – the future of economic and democratic institutions in light of the COVID-19 Pandemic and other challenges that the international community is facing. Such remarkable individuals attended the Webinar as Prof. Michael Kremer and Prof. Paul Romer, two Nobel Prize Laureates in Economics, Prof. Armen Darbinyan, former Prime Minister of Armenia, Prof. Igor Luksic, former Prime Minister of Montenegro, as well as others. This Webinar was co-organized with the University of Vienna

Watch the Webinar and read the summary here: https://bmiglobalsolutions.org/workshop-9-11-21/

### >>> OTHER BMI ACTIVITIES



#### Research Grant for BMI Researcher

Professor Hadas Mamane (BMI Water lab), together with Dr. Vered Blass (Porter School), recently won a 230,000 euro grant to fund new research titled "CO2 reduction in the oxidation of micropollutants – energy intensive vs. solar based processes". The grant is funded via the Israeli Ministry of Science & Technology under the Joint German Israeli Water Technology Research Program. The research will be carried out with German partners from Fraunhofer Institute for Interfacial Engineering and Biotechnology IGB.

#### **BMI Intern interviews for JPost**

BMI intern and a Master's Program in Conflict Resolution student was interviewed by the JPOST and shared his views on TAU and BMI.





#### **German Thesis Award**

Dr. Nadine Knab, currently a postdoctoral fellow at the Conflict Resolution lab, received the German Thesis Award (second prize) for her Ph.D. thesis from the Koerber Science Foundation in the social sciences section. Dr. Nadine Knab investigated in her Ph.D. socio-psychological determinants and interventions on micro-meso and macro levels to improve the situation of refugees in host countries. The German Thesis Award acknowledges excellent dissertations with high social impact. The Award ceremony was held in December in Berlin, hosted by the President of the German Parliament, Dr. Wolfgang Schäuble.



#### BMI Fellow's Valedictorian speech

BMI Fellow, Petr Pesov, gave the Valedictorian speech at the MA Degree ceremony of the TAU International School on August 12th, 2021.

#### Prof. Itai Sened's Lecture at the Weidenbaum Center Forum

Prof. Sened gave a lecture at the Weidenbaum Center Forum on Covid-19, the Abraham Accords, and the 2021 elections – Israel's politics in an Uncertain world.





#### Oxford PhD Student Receives BMI Support

According to the BMI Prize regulations, "the winner will commit to contribute 20% of the prize for scholarships to research students, whom the winner will select". Sam McQuillen is a research student of Prof. Sabina Alkire, the 2020 BMI Prize laureate receiving this grant. Mr. McQuillen's research seeks to incorporate participatory methods into how poverty is understood, measured, and addressed by policymakers, academics, and activists alike. His work focuses specifically on the Appalachian region of the United States, a coal mining region exhibiting high levels of durable, multidimensional poverty that he has worked within throughout much of his academic career. With the support of the Boris Mints Institute, Mr. McQuillen seeks to reconcile Appalachian understandings of poverty with internationally comparable measures, thereby contributing to a more inclusive and holistic approach to combating poverty.



#### Matanel Garden Inauguration, October 17th, 2021

The Matanel Garden project addresses ecological concerns related to natural resource exploitation while acting as a humanitarian effort to integrate people into this environment. A laboratory for social and biological experiments, research, planning, and innovative thinking in the garden promotes collaborations among researchers and activists. The garden would also serve as a forum for all participants and a platform for exchanging information between investors and users – knowing what might work and what might not work is crucial to both technological and legislative development. This garden is planned to be open to students from the surrounding high schools and weekly appearances of faculty members from the faculty of arts and music. In this project, we are attempting to create an environment that is constantly alive, constantly working, and constantly exploding with creative ideas.

#### Congratulations to Prof. Isaac Sasson

BMI congratulates Prof. Isaac Sasson, Head of the Demography lab, on his promotion to a Fellow Professor at TAU. We wish Prof. Sasson all the best and are confident of his future academic success.





#### **TAU-RAU collaboration**

Dr. Nimrod Rosler, Head of the International program in Conflict Resolution and Mediation, participated on behalf of BMI at an international conference at the Russian-Armenian University in Yerevan, titled: Geopolitics of Small States in the 21st Century.



#### **Donation by 2021 BMI Prize Laureate**

The laureate of the 2021 BMI Prize, Dr. John Nkengasong, graciously donated the prize funds to GHSS – an NGO based in Cameroon, whose mission is to develop innovative approaches to strengthen health systems necessary to deliver quality health care and diseases surveillance in resource-poor countries: www.ghsscm.org

#### RISE Discussions #2, November 25th, 2021

The second event in the RISE Discussions series was conducted as a hybrid in-person/virtual event on the topic of Nature-based Solutions (NbS). We were joined by policy and environmental engineering experts, each representing a different NbS approach to developing a sustainable future.

Watch the Webinar here: https://bmiglobalsolutions.org/the-rise-discussions-1-2/





#### Dr. Mints is declared: "Yakir Keren Hayesod"

Dr. Boris Mints, BMI's Founder and President, was recently declared "Yakir Keren Hayesod", one of the highest honors bestowed upon leaders who have demonstrated outstanding commitment to Keren Hayesod and the people of Israel.



#### Dr. Yaffe in the TAU 100 Excellent Lectures List

Dr. Nechumi Yaffe of BMI's Inequality Lab has been included in the list of TAU's 100 excellent lecturers. Well done!

#### Arava Seminar – Sustainable Development, February 7-10, 2022

Another cohort of students participated in an interdisciplinary seminar at the Arava desert. The seminar addressed various sustainable development issues, including on-hand experiences, lectures from experts and entrepreneurs, and much more. The heterogeneous group of students from various disciplines – Public Policy, Engineering, Conflict Resolution, Environment, and Sustainable Development – worked together to create solutions to real-life sustainable development challenges.





#### Research Seminar at Department of Public Policy, TAU

Do people who help refugees have a similar underlying motivation as people who show discrimination? Helping as a concept inherently entails unequal power relations, as the help provider has resources that the help recipient does not have. Thus, we argue that helping, not unlike discrimination, can lead to the maintenance of power relations, especially when helping is offered in a dependency-oriented manner. We propose that norms to help refugees (in one's social environment and country-level) impact which of these seemingly different action tendencies are shown. The results of this research project have implications for implementing initiatives to help disadvantaged groups in ways that can increase social equality.



#### BMI Fellow Eve Gutterman moderated a discussion at Fintech Week Tel Aviv

As part of the fintech week in Tel Aviv, BMI Fellow Eve Gutterman was moderating a fascinating discussion about the future of FinTech, sharing her innovative research regarding alternative currencies and their outcomes.

#### BMI Water lab hosted Seth Siegel, May 19th, 2022

In emerging economies, billions of people still require access to reliable, safe water supplies. How can we realize this potential on the ground? Can Israeli know-how and innovation help? Seth Siegel, the New York Times best-selling author of "Let There Be Water" and "Troubled Water" shared his vision. The talk was followed by a practical, workshop-style discussion with Israeli companies, TAU faculty, and students working to address this challenge in Africa and India.





#### BMI & Energy Com: Energy Storage Conference, August 8<sup>th</sup>, 2022

The Institute hosted prominent leaders from Israel's energy industry for fascinating discussions on energy storage, energy storage use in sustainable development, and how different types of storage can be used to create holistic policies in aspects of human development. Prof. Itai Sened, Head of BMI, was Among the keynote speakers.



#### BMI and the Faculty of Social Sciences Host 'Noar Shoher Mada', July 26th, 2022

Noar Shoher Mada is a project which gives gifted high-school children a chance to study at a university without going through final exams or SATs. Those students can take any course they want and get a first degree before finishing high school. In order to advance the Institute's mission of providing policy solutions to global challenges, three interdisciplinarity lectures will be presented pertaining to sustainable development and formulation of robust policy solutions in a changing environment to provide these young people with the essential tools for metacognition and problem-solving. BMI's Prof. Itai Sened gave opening remarks, and researchers Prof. Hadas Mamane-Stindl and Dr. Ram Fishman gave lectures to the students.

### >>> FUTURE ACTIVITIES

#### BMI 2022 Conference - Oxford

BMI is expected to hold an international conference at Oxford University. As part of the conference's discussions and workshops, public figures and prominent speakers from significant institutions worldwide will provide insights and create roadmaps for formulating strategic policy solutions for democratic and economic institutions, conflict resolution, labor policy, and human development in the future. The Institute will award the BMI Prize during the conference to an individual who has contributed significantly to conflict resolution.

#### **BMI Prize 2022**

2021-2's conflicts worldwide have releaved the many malfunctions and weaknesses of the democratic and economic institutions around the world, challenging humanity to coordinate to promote human development and welfare worldwide. The 2022 BMI Prize will be awarded to an outstanding academic figure that stood out in conflict resolution in terms of leadership, research, and innovative strategic policy solutions. The prize is expected to be awarded at the BMI Conference to be held at the end of this year in Oxford.

#### 'BMI Night's'

Starting in 2023, BMI will host a series of events for fellows and peers to foster collaboration and interdisciplinary enrichment. As part of these events, we will have speakers from academia, government, and the public sector to familiarize our fellows with the broad spectrum of institutional interests and mechanisms that need to be considered in formulating strategic policy decisions.





SUSTAINABLE DEVELOPMENT





RENEWABLE ENERGY







**INEQUALITY** 







WATER















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